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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,502	04/15/2004	Shozo Kobayashi	257702US8	6567

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EXAMINER	
PATTERSON, MARC A	

ART UNIT	PAPER NUMBER
1794	

NOTIFICATION DATE	DELIVERY MODE
04/14/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/824,502	KOBAYASHI ET AL.	
	Examiner	Art Unit	
	MARC A. PATTERSON	1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 November 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *5,7,8,10-13,16-20 and 22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *5,7,8,10-13,16-20 and 22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This Action is intended to replace the Action dated February 15, 2008.

WITHDRAWN REJECTIONS

1. Claims 5, 7 - 8, 10 - 12, 16 - 20 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Bottcher et al (U.S. Patent No. 4,390,745).

NEW REJECTIONS

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase 'not including the reinforced insulation layer' is indefinite as its meaning is unclear; because the stress - relief cone is partially covered by the reinforced insulation layer, it would appear that the stress - relief cone does include the reinforced insulation layer. The phrase 'does not cover a substantial area' is indefinite as the meaning of the term 'substantial' is unclear Claim 5 recites the limitation "ends" in line 8. There is insufficient antecedent basis for this limitation in the claim. For purposes of examination, Claim 5 will be interpreted to mean that the insulation layer is formed around the internal semiconductive layer

Claim Rejections – 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 5, 7 - 8, 10 - 13, 16 - 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over et al. Bottcher et al (U.S. Patent No. 4,390,745).

With regard to Claims 5, 7 and 22, Bottcher et al disclose a sleeve that is tube shaped (tube, therefore a cylinder; column 9, lines 39 - 43) that is cold - shrinkable (elastic stresses urge the tube to recover into conformity with a substrate; the tube is therefore elastically recoverable; column 5, lines 63 - 68) comprising a polymer that is elastic (elastomer; column 5, line 57), comprising an internal semiconductive layer (layer '9;' which is semiconductive, and which is an internal layer as shown in Figure 2; column 10, lines 17 - 20) and which includes a semiconductive material (carbon black; column 3, lines 40 - 43) and an insulation layer that is formed around the internal semiconductive layer (insulating layer; column 5, lines 43 - 46) and is molded (column 11, lines 27 - 33) and which is reinforced (comprising additives to achieve good discharge resistance; column 5, lines 43 - 46); as shown in Figure 2, the semiconductive layer is shorter in a longitudinal direction than the insulation layer, the sleeve has two stress - relief cones, wherein one stress relief cone is formed at each end of the sleeve (each cable shield end; column 6, lines 49 - 56); Bottcher et al also disclose additional layers outside of the layers of the sleeve (column 3, lines 13 - 27); Bottcher et al therefore disclose the addition of two sleeves to the outside of the sleeve, each of which is identical to the sleeve; Bottcher et al therefore

discloses an external semiconductive layer, the semiconductive layer of the outermost sleeve, that includes an elastic material and a semiconductive material, and is formed around the reinforced insulation layer, and is insulated from both the stress - relief cones by the other insulation layer of the other additional sleeve; the innermost surface of the internal semiconductive layer, innermost surface of the insulation layer and innermost surfaces of the stress - relief cones comprise the innermost surface of the sleeve as shown in Figure 2; because Bottcher et al disclose an external semiconductive layer that is molded, Bottcher et al disclose an external semiconductive layer that is molded around the reinforced insulation layer; however, the claimed aspect of the semiconductive layer being molded around the reinforced layer is given little patentable weight; Bottcher also discloses edge - cut sections near each of the stress - relief cones (sections 'x' and 'y' in Figure 2, in which the semiconducting layers are cut off from each other); the claimed aspect of the sections being formed by cutting, however, is directed to a process limitation and is therefore given little patentable weight; as shown in Figure 7, the ends of the stress relief cones are uncovered by the reinforced insulation layer; an external end portion, with respect to the internal semiconductive layer, of an outer periphery of each stress - relief cone is therefore uncovered by the reinforced insulation layer, and each stress relief cone has a partially covered surface that is partially covered by the insulation layer. Bottcher fails to disclose a semiconductive layer that is an outermost layer of the sleeve. However, Bottcher teaches the use of additional layers as stated above.

It would therefore be obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for an outermost layer having the composition of the

semiconductive layer or insulation layer, depending on the desired use of the end product as taught by Bottcher et al.

With regard to Claim 8, Bottcher et al do not disclose non - uniformities in thickness; Bottcher et al therefore disclose an external semiconductive layer having a substantially uniform thickness.

With regard to Claim 10 - 11 and 16, as stated above, Bottcher et al disclose additional layers inside of the layers of the sleeve (column 3, lines 28 - 35) and therefore disclose a sleeve that is supported on a disassemble carrier in an expanded state and edge - cut sections that are free of the external semiconductive layer to expose a part of the reinforced insulation layer at each end of the reinforced insulation layer and a reinforced insulation layer that is uncovered by the external semiconductive layer to be exposed.

With regard to Claims 12 – 13, the Bottcher et al disclose elastic material comprising ethylene - propylene rubber (column 4, lines 1 -2).

With regard to Claims 17 and 20, as shown in Figure 7, Bottcher et al also disclose two external insulation portions that are free of the external semiconductive layer.

With regard to Claim 18, because Bottcher et al disclose additional layers, Bottcher et al disclose an external semiconductive layer that is absent in a region in a direction of a length of the sleeve between the end of the sleeve and a point on an inner periphery of the sleeve at which the reinforced insulation layer and the stress - relief cone contacts.

With regard to Claim 19, Bottcher et al do not disclose a change in inner diameter, outer diameter or thickness; a constant inner diameter, outer diameter and thickness are therefore disclosed by Bottcher et al.

With regard to Claim 22, because Bottcher et al discloses a sleeve, Bottcher et al disclose an inner peripheral surface defining a hollow space penetrating through the tubular elastic sleeve in the longitudinal direction and the inner peripheral surface includes two first inner peripheral surfaces closest to ends of the tubular sleeve, two second inner peripheral continuous with the first two inner peripheral surfaces and a third inner peripheral surface continuous with an between the two second inner peripheral surfaces, as shown in Figure 7, and an outer peripheral surface that is uncovered as shown in Figure 7 as stated above.

ANSWERS TO APPLICANT'S ARGUMENTS

6. Applicant's arguments regarding the rejections of the previous Action have been considered but have not been found to be persuasive for the reasons set forth below.

Applicant argues, on page 13 of the remarks dated November 23, 2007, that Bottcher et al differs from the claimed invention in that in Bottcher et al the entire length of the surface of the stress cone is covered by the conductive layer as shown in Figures 6 - 8.

However, as shown in Figure 7, the end faces of the stress cones are not covered by the conductive layer, although the entire length of the external surface is covered.

Applicant also argues that Bottcher et al do not disclose a semiconductive layer that is shorter in the longitudinal direction than the reinforced insulation layer.

However, as shown at '6' in Figure 2, Bottcher et al disclose a semiconductive layer that is shorter in the longitudinal direction than the reinforced insulation layer.

Applicant also argues, on page 14, that Bottcher et al fail to disclose external portions which are free of the external semiconductive layer, and in which the semiconductive layer is absent.

However, as stated above, the end faces of the stress cones disclosed by Bottcher et al are not covered by the conductive layer; Bottcher et al therefore disclose external portions which are free of the external semiconductive layer, and in which the semiconductive layer is absent.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc A Patterson whose telephone number is 571-272-1497. The examiner can normally be reached on Mon - Fri 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Marc A Patterson/
Primary Examiner, Art Unit 1794